

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application.

LISTING OF CLAIMS:

1-12. (Canceled).

13. (Currently Amended) A method for transmitting a wireless signal using orthogonal frequency division multiplexing, the method comprising:

modulating the wireless signal using digital phase modulation;

sampling the wireless signal after modulation to generate a plurality of sampled values of the modulated wireless signal;

determining at least one amplitude value of the wireless signal using the plurality of sampled values;

comparing the at least one amplitude value to a predefined threshold to obtain a correction signal;

determining a phase of the wireless signal;

providing the correction signal with the phase of the wireless signal;

subtracting the correction signal from the wireless signal after providing the correction signal with the phase of the wireless signal to reduce the amplitude values of the wireless signal that lie above the predefined threshold to a value of the threshold to generate a corrected wireless signal;

pre-equalizing the corrected wireless signal;

converting the pre-equalized wireless signal into an analog wireless signal using at least one digital-analog converter;

amplifying the analog wireless signal; and

transmitting the amplified wireless signal.

14. (Previously Presented) The method of claim 13, wherein the correction signal is subtracted from the wireless signal a plurality of times, the correction signal being re-determined for each subtraction.

15. (Previously Presented) The method of claim 14, wherein the correction signal includes Gauss pulses.

16. (Previously Presented) The method of claim 14, wherein the correction signal is subtracted from the wireless signal, until the amplitudes of the corrected wireless signal are at most equal to the predefined threshold.

17. (Previously Presented) The method of claim 14, wherein a number of times the correction signal is to be subtracted from the wireless signal is predefined.

18. (Previously Presented) The method of claim 16, wherein the wireless signal is oversampled.

19. (Currently Amended) A transmitter for transmitting a digital signal, the transmitter comprising:

a modulator to perform orthogonal frequency division multiplexing (OFDM) and a phase modulation on ~~a~~ the digital signal to be transmitted to form a modulated OFDM signal;

a processor to sample the modulated OFDM signal to generate a plurality of sampled values, determine at least one amplitude value of the modulated OFDM signal, compare the at least one amplitude value of the modulated OFDM signal to a predefined threshold to form a correction signal, determine a phase of the scanned modulated OFDM signal, provide the correction signal with the phase of the modulated OFDM signal, and subtract the correction signal from the modulated OFDM signal after providing the correction signal with the phase of the modulated OFDM signal to reduce the amplitude values of the modulated OFDM signal that lie above the predefined threshold to a value of the threshold to output a corrected modulated OFDM signal;

a pre-equalizer to pre-equalize the corrected modulated OFDM signal ~~after the correction signal is subtracted from the modulated OFDM signal to output a pre-equalized corrected modulated OFDM signal~~; and

at least one digital/analog converter to convert the pre-equalized corrected modulated OFDM signal into an analog signal.

20. (Previously Presented) The transmitter of claim 19, wherein the processor is configured to subtract the correction signal from the modulated OFDM signal a plurality of times and to re-determine the correction signal for each subtraction.

21. (Previously Presented) The transmitter of claim 20, wherein the processor is configured to subtract the correction signal, until the amplitudes of the corrected modulated OFDM signal are at most equal to the predefined threshold.

22. (Previously Presented) The transmitter of claim 20, wherein the processor is configured to subtract the correction signal from the wireless signal a number of times indicated by a predefined value.
23. (Previously Presented) The transmitter of claim 21, wherein the processor is configured to generate the correction signal, and the correction signal includes Gauss pulses.
24. (Previously Presented) The transmitter of claim 23 wherein the processor is configured to perform oversampling on the modulated OFDM signal.